

June 7, 2012

Dear [REDACTED]:

SUBJECT: Analysis Results for [REDACTED], Humboldt Township, Marquette County, Michigan

The United States Environmental Protection Agency (EPA) collected a sample from your private water supply on March 22, 2012. Enclosed are tabulations of the sample analysis results. The EPA sampled the water supply to assess if past activities at the nearby Humboldt Mine and Mill site had affected groundwater and individual water supplies in the area.

The concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County.

It is noteworthy that nitrate was detected in the water supply at a concentration of 8.5 milligrams per liter (mg/l). While this concentration is below the established health concern level of 10 mg/l, it is near enough to warrant monitoring. While nitrates in drinking water are not generally a concern for healthy adults, concentrations above the health standard may be harmful to infant children. We recommend you consult with your local health department about potential health issues and options to monitor your water supply for nitrate content.

The EPA and the Michigan Department of Environmental Quality (DEQ) appreciate your cooperation in these investigations. If you have questions about the sampling efforts, please contact Nuria Muñiz at 312-886-4439. If you have questions about the analysis results, please contact Chuck Thomas, DEQ by phone at 906-346-8534 or email at [thomasc3@michigan.gov](mailto:thomasc3@michigan.gov).


EPA will be in Humboldt Township on June 21, 2012 to present general results about well-water sampling to the public at a community meeting. No site-specific results will be identified by homeowner's address during the presentation.

You also may make an appointment to discuss your results in person during our visit in Humboldt Township. Please contact Community Involvement Coordinator Don de Blasio, 312-343-6666, or by e-mail at [deblasio.don@epa.gov](mailto:deblasio.don@epa.gov).

June 7, 2012

Sincerely,

Nuria Muñiz  
U.S. Environmental Protection Agency  
Superfund Division  
Region 5, Chicago IL



Charles H. Thomas, P.G.  
Michigan Dept. of Environmental Quality  
Resource Management Division  
Upper Peninsula District Office

Enclosure

cc: Ms. Dana DeBruyn, DEQ  
Mr. Steve Harrington, DEQ  
Mr. Patrick L. Jacuzzo, Marquette County Health Dept.  
Mr. Don Deblasio, EPA  
Mr. Mark Johnson, ATSDR



[REDACTED]

June 7, 2012

Dear [REDACTED]

SUBJECT: Analysis Results for [REDACTED] Humboldt Township, Marquette County, Michigan

The United States Environmental Protection Agency (EPA) collected a sample from your private water supply on March 21, 2012. Enclosed are tabulations of the sample analysis results. The EPA sampled your water supply to assess if past activities at the nearby Humboldt Mine and Mill site had affected groundwater and individual water supplies in the area.

The concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County. While it is entirely normal within the region, it is noteworthy that iron was detected at a concentration higher than the secondary drinking water standard, 300 micrograms per liter (ug/l). The secondary standard is not a health-risk standard. It is an aesthetic water quality standard.

The water supply sample contained iron at 1180 ug/l. Water containing iron at concentrations above the secondary standard may cause staining of plumbing fixtures and laundry, and may have objectionable turbidity, color, and odor.

The EPA and the Michigan Department of Environmental Quality (DEQ) appreciate your cooperation in these investigations. If you have questions about the sampling efforts, please contact Nuria Muñiz at 312-886-4439. If you have questions about the analysis results, please contact Chuck Thomas, DEQ by phone at 906-346-8534 or email at [thomasc3@michigan.gov](mailto:thomasc3@michigan.gov).

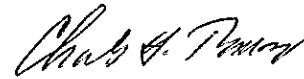
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Enclosure

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Mr. Steve Harrington, DEQ  
Mr. Patrick L. Jacuzzo, Marquette County Health Dept.  
Mr. Don Deblasio, EPA  
Mr. Mark Johnson, ATSDR



June 7, 2012

Dear [REDACTED]:

SUBJECT: Analysis Results for Water Supply at [REDACTED] Humboldt Township, Marquette County, Michigan

The United States Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (DEQ) collected samples from your private water supply on March 21, 2012. Enclosed are tabulations of the EPA sample analysis results and a copy of the DEQ laboratory report. Your water supply was sampled to assess if past activities at the nearby Humboldt Mine and Mill site had affected groundwater and individual water supplies in the area and to confirm previous analysis results for arsenic content.

Except for arsenic, the concentrations of inorganic substances and metals detected in the water supply samples were below established federal and state drinking water standards and health concern levels, and were similar to groundwater quality generally found in Central Marquette County. While it is entirely normal within the region, it is noteworthy that both iron and manganese were detected at concentrations higher than secondary drinking water standards. The secondary standard for iron is 300 micrograms per liter (ug/l) and the secondary standard for manganese is 50 ug/l. Secondary standards are not health-risk standards. They are aesthetic water quality standards.

Arsenic was again detected and concentrations ranged from 17 to 20.5 ug/l or about twice the health-risk advisory concentration of 10 ug/l. Some people exposed over a long period to elevated levels of arsenic in drinking water may experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Arsenic is a naturally occurring groundwater contaminant. There are many types of treatment systems easily installed and operated that can remove arsenic from residential water supplies. We recommend you consult with your local health department about your options.

The water supply sample contained iron at concentrations ranging from 4370 to 4940 ug/l and manganese at concentrations ranging from 110 to 126 ug/l. Water containing iron and manganese at concentrations above the secondary standards may cause staining of plumbing fixtures and laundry, and may have objectionable turbidity, color, and odor.

The EPA and the DEQ appreciate your cooperation in these investigations. If you have questions about the sampling efforts, please contact Nuria Muñiz at 312-886-4439. If you have questions about the analysis results, please contact Chuck Thomas, DEQ by phone at 906-346-8534 or email at [thomasc3@michigan.gov](mailto:thomasc3@michigan.gov).


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